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## CRITICISMS AND DISCUSSIONS.

### THE MECHANICAL EXPLANATION OF RELIGION.

There has been a common opinion in the past that what, in a broad sense, is known in philosophy as mechanical explanation—that is, explanation by antecedent cause,—is absolutely opposed to teleological explanation. According to this view, if some theory of a mechanical form is true, any teleological theory (concerning the same explicandum) must be false, and vice versa. This opinion is even still not uncommon, notwithstanding the philosophy of Leibniz and Kant's third critique. To me the contrary view appears to be correct, and the recognition of its truth to be very important, especially in the treatment of religious phenomena. A detailed argument in support of this contrary view has already appeared in this journal from the pen of its editor, Dr. Carus.<sup>1</sup> In the present article I propose to offer an analysis of the situation, from a somewhat different standpoint, in further support of this theory.

Since the time of Fichte, the dominant school of speculative thought has tended toward explanation that is teleological. With regard to mechanical explanation two attitudes have been adopted. It has been said, on the one hand, that mechanical explanation, accurately carried out, is true "so far as it goes," but that it is not the whole truth, and that in particular, it must be supplemented by teleological explanation. On the other hand, the position that mechanical explanation is *no* explanation seems to have been held not infrequently. Advocates of this view would probably admit that to many physical phenomena no teleological explanation can reasonably be assigned; and, in so far as they held that explanation

<sup>1</sup> Vol. XXIII, No. 2.

must be either mechanical or teleological, they would consequently have to admit that of such physical phenomena a mechanical explanation is the alternative to no explanation at all. They would be disinclined, nevertheless, to accept such explanation. And they would resent any attempt to explain mechanically something with regard to which they believed themselves possessed of a teleological explanation. This happens most frequently concerning things that are judged to be valuable, and perhaps most conspicuously in connection with religion.

Even those who admit that mechanical explanation is true "so far as it goes" often appear to share this resentment toward attempts to treat religion from the mechanical point of view. This is not because such attempts have always issued in explanations which were *mechanically* inadequate, even if this be true. Any thinker, even though he were to believe in the universality of mechanical explanation, would object to such explanation in so far as it was inaccurate. He might resent any general acceptance of the proposition that water under normal pressure boils at 211° F. And he might be willing to admit that the mechanical explanation of religion which sees its origin in the lust of priests and the tyranny of kings cannot be accepted as remotely probable. This, however, is not the attitude of the teleologist. He says, in effect, that such a phenomenon as religion, being of vital importance to man, must be explained by its function, not by its cause; and that its significance is destroyed by any theory which is in essence mechanical. He objects to "the Enlightenment" treatment of religion, not because it was inaccurate in detail, but because it was wrong in its *form*. And his position seems at first sight to be borne out by modern philosophical speculation.

What is usually regarded as the idealistic attitude toward mechanical explanation, when this is offered as ultimate philosophical hypothesis, seems now established. We obviously cannot explain the whole of existence by something, as it were, antecedent to it. The alternative is for mechanical theory to explain *part* of the whole by an antecedent and "ultimate" *part*. The objection which then finally emerges is that the explanatory reality,—whatever form it assumes,—remains *mechanically* inexplicable. Explanation has been obtained perhaps even at the cost of creating a new explicantum.

It seems to be sometimes assumed that the only conclusion to be drawn from this position is that philosophical explanation must

be teleological; but the considerations which make mechanical explanation finally impossible, make teleology impossible also. We certainly cannot explain the whole of existence by an end that is its consequent,—which is somehow to come after it, and is, at any rate, additional to it. There is nothing after, just as there is nothing antecedent to, the whole of existence. The alternative here also is to explain (teleologically) one *part* of the whole by another *part*. But this is formally no better than the analogous situation with regard to mechanism. At least, this is so if “explaining a thing teleologically” be defined as “showing that it is a means to the realization of something else.” For the teleologist’s “end” is a final inexplicable just as is “the first cause” of the mechanist.

It of course might be held that we give a teleological explanation of anything if we show that it is *either* means or *end*; and upon such a view we have, in showing that one thing is means to another, given a teleological explanation of both things. But to such a theory the advocate of mechanical explanation could reply that he, in his turn, will hold that both the explicandum and its cause are (mechanically) explained once the latter has been assigned. The teleologist could not reasonably deny the justification for this procedure without renouncing his own formally similar procedure. It must therefore be concluded that if ultimate philosophical explanation cannot be mechanical because it involves the postulating of a reality not mechanically explicable, an analogous reason leads to the abandonment of the idea that such explanation can be teleological.

The teleologist may endeavor to escape from this position by suggesting that everything is to be explained as both means and end, the significance of this suggestion being that everything is teleologically explained in so far as everything is a means. Apart from the difficulty of proving such a theory, the formal difficulty still remains. No doubt everything is explained so far as everything is means; but, on the other hand, nothing is explained so far as everything is end. The explanation still leaves an inexplicable, an inexplicable, indeed, which now permeates the whole.

The result which thus appears to be forced upon us by considering the formal characteristics of the two methods of explanation, is corroborated by an impartial survey of actual theories embodying them. If it must be admitted, in the face of the teleologist’s charge, that the mechanical “first cause” alternates between

possessing more content than can be justified and possessing no content at all; even if it must be admitted that this explanatory reality always tends to approximate to the empty abstraction, the thing-in-itself; it must be charged to the account of the teleologist that his professedly complete explanations are purely verbal. The theory that all the parts of the universe are means to a certain end, such as the realization of self-consciousness or spirit, is plausible, if at all, only so long as we keep to the most general form of statement. Descend to particular facts; inquire what evidence there is for believing that the realization of self-consciousness or spirit demands, for example, just the existing number of human beings, or of birds, or of trees; and the whole "explanation" is seen to be "on paper" only.

It must therefore be concluded that when regarded as ultimate philosophical explanation, theories of mechanism and theories of teleology are, formally and materially, equally unsatisfactory. The recognition of this fact has been stated in the form that of the universe as a whole no explanation can be given. According to this view, which appears correct, the totality of existence is the one great inexplicable which must simply be accepted; and the most philosophy can do is to illuminate its nature.

So far as philosophy is concerned, the interesting question at this point is what form this illumination of the nature of the universe is to take,—in other words, precisely what is the problem of philosophy. The importance of this question is due to the fact that no one can be expected to solve a problem which is not definitely stated. It is outside the scope of the present article to deal with this point further than to emphasize its importance. For it is in fact partly due to the neglect of it that the conflict between the teleologist and the mechanist breaks out once more, but in a form somewhat different from that already considered. Whether or not the attempt to give an explanation of "the whole" is now definitely abandoned, the actual problems dealt with are of a more modest character. Each side clings to its form of explanation as the vitally important one, and, applying it to one finite phenomenon after another, endeavors to extend its range indefinitely. Attempts are made to show, on the one hand, that the category of means, on the other hand, that the category of antecedent cause, is of universal application, each position being stated as in some sense a methodological principle, while the presumption in favor of each is con-

sidered to vary directly with the number of phenomena explicable, and inversely with the number not explicable, by it.

When the two positions are thus opposed, it may seem difficult to decide between them, or to see on what principle any decision is to be reached. In practice the universalization of each type of explanation is fraught with difficulties, upon which its opponents fasten. Mechanical explanation appears to proceed smoothly so long as it keeps to the inorganic sphere. Immediately it leaves this sphere, its task becomes harder, and the admission must be made that of much that is organic no mechanical explanation has yet been given. The universal applicability of this type of explanation cannot therefore be considered more than a methodological ideal. The teleologist appears to occupy an analogous position. He moves with ease in the organic realm, although even here he cannot yet maintain that his task is completed; but when he enters the realm of the inorganic, he is unable to proceed at all unless he adopts some elaborate and unverifiable hypothesis about the nature of matter. Thus, the obvious fact is that phenomena which can readily be given a mechanical explanation are such as afford little apparent ground for a teleological explanation, and vice versa.

Suppose now that all phenomena whatsoever could be divided into three classes as follows: (1) phenomena of which there exists a mechanical but not a teleological explanation, (2) phenomena of which there exists a teleological but not a mechanical explanation, and (3) phenomena of which there exists neither a mechanical nor a teleological explanation. In such a situation, the chance of a conflict between the mechanist and the teleologist would appear to be remote. Of course the mechanist might maintain that present-day teleological explanation is illusory, and that future knowledge will make it clear that the phenomena in classes (2) and (3) can be explained mechanically. And if the teleologist were to adopt an analogous position with regard to present-day mechanical explanations and the phenomena in classes (1) and (3), a conflict certainly would result. Such a conflict, however, would be based upon faith in the universal applicability of the methods concerned, and, in the absence of evidence, would be unreasonable. Hence, the conflict that now arises is not based upon such faith. The fact is that the above supposition is not true, there being a fourth class of phenomena, those, namely, of which explanations of both kinds are offered. This brings the trouble to a definite head. For of these

phenomena the teleologist maintains the correctness of his own and the falsity of the mechanical explanation, while the mechanist similarly asserts that his explanation is the only true one.

The coloration of the humming-bird, for instance, has been explained both teleologically and mechanically. Teleology urges that the phenomenon is explained by its function. This function, it says, is sexual attraction, as a result of which the survival of those birds that were colored in special ways was guaranteed. The mechanist points out, however, that the humming-bird is normally in incessant motion, and urges that the relatively large quantities of waste products accumulating in its feathers as a result of its activity is the correct explanation of its coloration.

Now, in so far as the teleologist denies that the mechanical, and the mechanist that the teleological explanation, is true, there is a definite conflict between them; but it is a conflict which investigation, theoretically at least, could remove. A carefully performed investigation might show that the coloration of the humming-bird subserves no biological purpose, or it might prove that the mechanical explanation is incorrect. The important point, however, is that it could, theoretically, prove that both explanations *are true*. For these explanations, so far from being logical contradictories, are not even logical contraries. In themselves they do not conflict at all. The only possible conflict occurs when the advocate of one explanation denies the other. And this is unjustifiable. It might quite well be that the coloration of the humming-bird is caused as the mechanical explanation asserts, or at least in some rather similar way, and that it has had a biological significance. The one explanation states that the phenomenon has a cause; the other, so far from denying this, merely asserts that it has a function. No conflict is possible between two theories one of which states that a certain phenomenon has a cause and the other that it has an effect.

The harmony between the two explanations is rendered clearer by considering what "natural selection," which is the essence of much teleological explanation, really is. Darwin accepted organic variations as one of his ultimates, and he then endeavored to show that, with variations in the environment (in the widest sense of the term), one organic variation survives rather than another. He did not deny that organic variations have causes, although he professed himself entirely ignorant as to what these causes are. Now with regard to such a phenomenon as the coloration of the humming-

bird, the teleologist really adopts the Darwinian hypothesis in its original form, while the mechanist has proceeded, not to deny this hypothesis, but rather to enlarge it by assigning a cause for one of the organic variations.<sup>2</sup>

The conflict between the mechanist and the teleologist nevertheless continues, and its most acute stage is reached when both put forward explanations of religious phenomena. Let us suppose that it be asked why a certain man prays. The teleologist, having regard to the function of prayer in the man's life, may say that it is because prayer uplifts and strengthens him. If he answers thus, he is giving what is formally a perfectly good teleological explanation, which may also be true in fact. But the mechanist may say that a man prays because his mother has taught him to pray. Is there then a conflict between the mechanist and the teleologist? Not if "because" be used in an appropriate sense by each. For it seems unquestionable that both explanations may be correct: the man may be uplifted and strengthened by prayer and he may pray now because he has been taught to pray. While this cannot very well be denied, the teleologist usually exhibits a certain hostility toward the mechanical explanation. This hostility increases in proportion as the phenomena concerned become more extensive, reaching a climax when such phenomena become synonymous with religion as a whole. The situation, however, is clear, and there is no ground whatever for the hostility. Just as the coloration of the humming-bird may have both a mechanical and a teleological explanation, so may any phenomenon whatsoever. If therefore the teleologist is interested in the function of religion, in the purpose it plays in social and individual life, he may limit his statements to the making explicit of this aspect of religion, and is quite justified in so doing. But the man who seeks for the causal antecedents of religion is equally justified, and his mechanical explanation is in no way opposed to that of the teleologist. The one type of explanation is without prejudice to the other.

The most that an advocate of one type can say to an advocate of the other is that he is only interested in his own type of explanation. Such an attitude, however, would be onesided. An impartial and complete review of religion will include a consideration both of its function and of its antecedent conditions. Indeed, as

<sup>2</sup> By assigning a particular kind of cause, however, namely, a conscious purpose, it is often thought that a teleological explanation of organic variations is given; but see below, with regard to the explanation of a man's possession of a boat.

we are able to control events only in so far as we know their causes, the mechanical explanation of religion seems to be as valuable as, if not more valuable than, its teleological explanation. And there is a further reason for the importance of mechanical explanations of religious phenomena at the present time. In the past, such explanations have often involved too much hypothesis about the beginnings of mental life to render them either convincing or useful, not to mention that they have usually laid themselves open to the charge of merely reconstructing complex evolved phenomena out of elements that are themselves products of evolution. What is now needed is a treatment of religious phenomena which shall connect them with psychical processes such as we know them. Such a treatment would distinguish between a man's psychical constitution and what tradition gives him. With this distinction in mind, it would explain the life of a present-day religious man by reference to *his* psychology and not by reference to that of some primitive ancestor. And it would endeavor to indicate the *psychical tendencies* which lead the religious man to *accept the religious tradition*.

It is fairly obvious that the easy adoption of this standpoint requires a recognition of the fact that mechanical and teleological explanations, so far from being in opposition, are complementary. In the past, various obstacles have stood in the way of this recognition. It will therefore be of use to consider now what the more important of these obstacles are.

A reference may first of all be made to the influence of rash statement. It is always difficult for the enthusiast to keep his speech within the bounds of logic; but when the mechanist, for example, asserts positively, and in the absence of anything that could be called strict scientific evidence, that the cause of religious experience is matter in motion, he inevitably finds himself in conflict both with the sober teleologist and with the teleologist who is as rash as himself. This, however, is obvious; and since the conflict thus arising is not in itself any reason why the complementary character of the two types of explanation should not be recognized, it is unnecessary to consider it further.

We now come to a more important point. Some confusion seems frequently to have been due to the employment of the term "explanation" without any precise definition of its meaning. It is commonly thought that an explanation is a complete account of a thing, so that if one explanation is true, any other must be false.

This no doubt is only felt in a vague kind of way; and it would, in fact, be an error to say that the philosophical explanation of a thing consists in stating all the propositions that are true of it. All explanation is the establishing of certain kinds of connection between the phenomena to be explained and others; and no explanation includes the proposition that it is a complete explanation. Possibly, it would be an advantage if the term "explanation" were not to be used in the present connection. If it were to be definitely recognized that a mechanical "explanation" consists in assigning causal antecedents, while a teleological "explanation" is the assignment of function, it would be realized that the two types of "explanation" do not conflict at all, but that they are, in fact, a viewing of phenomena from two standpoints.

Apart from this difficulty concerning the term "explanation," there has been a perhaps greater difficulty in connection with the term "teleology." There has as a rule been no clear conception of what was being done in giving a teleological explanation. Perhaps the chief point of confusion here has been in the idea that a teleological explanation of any phenomenon consisted in showing that there existed antecedent to the phenomenon a purpose in some mind, and that this purpose brought the phenomenon into being. Let us suppose, for example, that a man who lives on the bank of a river is asked why he has a boat. He may reply that he has it for pleasure. In giving such a reply, he would be offering a good teleological explanation of his possession of a boat,—he would be explaining this fact by the function which the boat has in his life. But he might conceivably have given a mechanical explanation. He might have replied that he has the boat because a friend one evening suggested he should procure one, that the idea struck his fancy, that he happened to possess the necessary money to buy one, that there already existed a boat which could be bought, and so on. Such an explanation would certainly be as true as any teleological explanation. If the boat did give the man pleasure, his possession of it on the other hand certainly had causal antecedents. That is to say, his possession of the boat had both a cause and an effect. And so far as the mechanist restricts himself to the assignment of a cause and the teleologist restricts himself to the assignment of a function, no conflict is possible.

But now there frequently arises a misapprehension. Among the causal antecedents of the man's possession of the boat, there

was a certain state of his mind, which included a purpose. It might be maintained that of all the causal antecedents this was the most important and deserves to be specially emphasized in any explanation of the man's possession of the boat. And it must be admitted that this state of the man's mind *was* important, although whether it was more important than the fact that he possessed a certain amount of money, is not easy to determine. But however important it may have been, it must be noted that it is a part of the mechanical explanation of the fact to be explained: it is one of the fact's causal antecedents.<sup>8</sup> Now the teleologist seems to have frequently held that this factor constitutes the teleological explanation of the fact. He sees that the conscious purpose is important; and he appears to confuse a conscious purpose which is an antecedent cause of a phenomenon, and therefore part of its mechanical explanation, with the "purpose" of the phenomenon in being a means to an end. "Purpose," in the latter sense, however, does not refer to a conscious state, but merely to the manner in which a thing functions,—to what might be called, in a broad sense, an effect of the thing.

That a conflict should have arisen between the mechanist and the teleologist as a result of such a confusion was inevitable. It frequently led to the teleologist selecting *a part* of the mechanical as *the* teleological explanation; and his conflict with the mechanist has consequently often been due to the fact that what is admittedly an important part of the mechanical explanation is asserted by the teleologist to be the whole explanation and to be teleological. The teleologist did not see that his explanation was really mechanical, nor that it was precisely this which caused the conflict between himself and the mechanist. The two kinds of explanation could not be regarded as complementary while the teleologist asserted one antecedent cause and the mechanist another. In fact, the conflict between mechanist and teleologist has often been essentially similar to a dispute which would arise between two scientists were one to say that the *cause* of a certain event is A, and the other that this *cause* is B, or at least A plus C.

Connected with this misapprehension of the true character of teleological explanation, is the more or less popular view of the divine ordination of religion. According to this view, the true explanation of religion, which as a result of the above confusion

<sup>8</sup> The psycho-physical parallelist would deny this; but, then, *he* could not hold that the man's purpose was of the slightest importance, as it, for him, could not affect *any physical* phenomenon.

is regarded as teleological, is that a purpose in God's mind determined its existence. This is, of course, a mechanical explanation. And it conflicts with what is ordinarily called mechanical explanation of religion because this is usually, in its aim, scientific,—in that it attempts to discover *verae causae*. In so far, therefore, as such a “teleological” explanation was implicitly accepted, it would produce hostility toward such mechanical explanation as endeavored to be scientific. The conflict thus arising would really be between a scientific and an unscientific mechanical theory.

The misapprehension just considered leads to the position that any given “teleological” explanation must conflict with any given mechanical explanation. But apart from such *post facto* conflict, the teleologist, as has been noted above, frequently objects to the very idea of mechanical explanation. It appears to me that the reason of this attitude is largely to be found in two ideas, which must be considered briefly.

The first of these concerns the causal relation. Among the various theories with regard to the nature of this relation there has appeared the view that cause and effect are identical, the effect being merely a transformation of the cause. Such a theory is not compatible with certain common usages of causal terminology; but, on the other hand, it appears to be implicit in much popular belief. Now a person who accepted such a theory would be disinclined to admit that something regarded by him as valuable had a cause less valuable than itself. As it is generally considered that superstition in its more primitive forms and the feelings associated with it are less valuable than enlightened religion, a certain hostility arises toward any attempt to show that the former is at least part of the cause of the latter. Since this, however, cannot be very well denied, the teleologist admits it with a somewhat bad grace, maintaining that the assignment of causal antecedents is not *explanation*. Such an assertion has no point once it is seen what explanation is.

It is unnecessary to enter here upon any criticism of this conception of the causal relation, although it could be shown not to be in agreement with recent conclusions on the subject. The important point is to maintain that the value of a thing is independent of its genesis. If an institution, for instance, really is valuable at the present day, it remains valuable whatever its origin may have been. To say that its value is depreciated by supposing that its cause was less valuable than itself is to admit that it is not *it* that is valued

but some belief about it. The value then naturally disappears when the belief is proved to be false. It is therefore unreasonable to depreciate the value of religion, for example, because of the undoubted fact that superstition moulded its earlier forms. Indeed, it would be more reasonable for the man who is convinced of the value of religion to place upon earlier superstitions a higher value; for have not they been part of the cause of this valuable thing? There is, however, a strong disinclination to adopt this point of view. In spite of anthropological evidence, the teleologist will almost deny that religion could have an origin with which evil was intimately associated. It is probably here that we should look for the explanation of the not uncommon attitude of hostility toward such theories of religion as were propounded by Holbach and the Encyclopedists. Of course, objection may be taken to such theories on the ground that they assign causes wrongly; but to him who considers religion valuable, no reasonable objection to them can be made to depend upon the fact that the causes assigned would be considered by us destitute of value, or even positively bad.

Perhaps an even more important factor in the teleologist's hostility toward the mechanical explanation of religion is the idea, often felt more or less dimly rather than clearly cognized, that any account of the genesis of an institution tends to lessen its authority over the individual. Those who believe that the authority exercised by religion is productive of excellent results, naturally desire that the authority of religion shall not be weakened. The teleologist, who often holds this belief, therefore tends unconsciously to object to *any* mechanical explanation of religion. This tendency is perhaps strengthened by a kind of unconscious pragmatism, by the almost unconscious belief that a theory that has bad consequences must be false. There thus arises on the part of the teleologist a hostility to the mere form of mechanical explanation, a hostility which is rendered greater by a great hope and a great fear.

The question involved here must be admitted to be important. But there appears to have been some misapprehension as to what this question is. The situation is not such as to justify hostility toward explanation merely because it is mechanical in form. To suppose that it is, is to miss the point entirely. The question belongs, in fact, to the sphere of practice rather than to that of theory, and may be termed in a general sense educational. From a practical standpoint, it can be inquired whether it is justifiable to propagate

a knowledge of the genesis of certain institutions if it seems likely that such knowledge will have bad consequences; but the question, what is the truth, is quite distinct from the question, should the truth be freely given to all. It may be practically best at a given period to prevent the knowledge of the genesis of religion, for example, (supposing that we possess it), from becoming popular; but this is by no means equivalent to admitting that religion has no antecedent cause. If, therefore, the teleologist here makes an objection to the mechanical theory, he must base it on the unwisdom of the mechanist in publishing his theory and not on that theory's form.

Such appear to be the chief factors in the mechanical explanation of the belief that teleological and mechanical theories of religious phenomena are absolutely opposed to each other. Contrary to this belief, our general conclusion must be that the two forms of explanation are complementary and in no sort of conflict. It is perhaps necessary to add that by "mechanical explanation" here is not meant "explanation by matter in motion exclusively" (*vide* first paragraph of article).

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#### AN EMPIRICAL VIEW OF THE TRINITY.

There are many rationalistically-minded theists to-day who wonder how intelligent persons can continue to use the language of the old Trinitarian dogma. God to them is an unquestioned reality; although we never see or hear Him, and cannot clearly say where or how He exists, we can be sure that He does exist. But that He is One God in Three Persons seems to them utterly unintelligible and a remnant of scholastic metaphysics which modern common sense should repudiate. Surely, when Christianity is thoroughly rationalized, this incomprehensible and self-contradictory doctrine must yield to the clean-cut Unitarian conception.

In answer to this familiar contention, it would not be a paradox to say that the mystical Trinitarian formula, though, to be sure, it is clothed in the creeds with an unwarranted license of language, is based far more firmly upon experience than the more sharply defined theistic conception of the rationalists.